

In the Claims

Please cancel claims 7, 60-62, 65, 67, and 69-70 without prejudice.

Please amend claims 1, 19, 20, 23, 25, and 41 as follows:

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1. (Currently Amended) A method of increasing the reproductive performance of a female swine, comprising the step of administering to the female swine a feed composition comprising marine animal products ~~containing omega-3 fatty acids or esters thereof that serve as a source of metabolites in the female swine to improve reproductive performance of the female swine~~ comprising C₂₀ and C₂₂ omega-3 fatty acids or esters thereof.

2. The method of claim 1 wherein the marine animal product is selected from the group consisting of a fish oil, a fish oil derived from a fish meal product, and a fish meal product or a mixture thereof.

3. The method of claim 1 wherein the marine animal product comprises a fish oil from a North Atlantic cold water fish.

4. The method of claim 3 wherein the fish oil comprises salmon oil.

5. The method of claim 1 wherein the feed composition further comprises omega-6 fatty acids or esters thereof.

6. The method of claim 5 wherein the omega-6 fatty acids/esters to omega-3 fatty acids/esters ratio in the feed composition as a final mixture is from about 3:1 to about 20:1.

7. Canceled

8. The method of claim 4 wherein the feed composition as a final mixture comprises about 0.025% to about 1% by weight of salmon oil.

9. The method of claim 2 wherein the feed composition as a final mixture comprises about 0.025% to about 1% by weight of the fish oil.

10. The method of claim 4 wherein the feed composition as a final mixture comprises about 0.025% to about 2% by weight of salmon oil.

11. The method of claim 2 wherein the feed composition as a final mixture comprises about 0.025% to about 2% by weight of the fish oil.

12. The method of claim 2 wherein the feed composition as a final mixture comprises about 1% to about 10% by weight of the fish meal product.

13. The method of claim 1 wherein the feed composition is administered daily to the female animal.

14. The method of claim 1 wherein the feed composition is administered to the female swine beginning about 30 days before a first mating of the female swine during an estrus and continuing through a second mating of the female swine during the same estrus.

15. The method of claim 1 wherein the feed composition is administered to the female swine beginning about 1 to about 4 days prior to parturition and continuing through the next breeding.

16. The method of claim 1 wherein the feed composition is administered during lactation.

17. The method of claim 1 wherein the feed composition as a final mixture further comprises an antioxidant.

18. The method of claim 2 wherein the omega fatty acids in the fish oil are stabilized by prilling.

19. (Currently Amended) A method of increasing the number of live births to a female swine, comprising the step of administering to the female swine a feed composition comprising marine animal products ~~containing omega-3 fatty acids or esters thereof that serve as a source of metabolites in the female swine to increase the number of live births to the female swine~~ comprising C₂₀ and C₂₂ omega-3 fatty acids or esters thereof.

20. (Currently Amended) A method of increasing the total number of births to a female swine, comprising the step of administering to the female swine a feed composition comprising marine animal products ~~containing omega-3 fatty acids or esters thereof that serve as a source of metabolites in the female swine to increase the total number of births to the female swine~~ comprising C₂₀ and C₂₂ omega-3 fatty acids or esters thereof.

21. Canceled

22. Canceled

23. (Currently Amended) A method of increasing the uniformity of birth weight of offspring of a female swine, comprising the step of administering to the female animal a feed composition comprising marine animal products ~~containing omega-3 fatty acids or esters thereof that serve as a source of metabolites in the female swine to increase the uniformity of birth weight of offspring of a female swine~~ comprising C₂₀ and C₂₂ omega-3 fatty acids or esters thereof.

24. Canceled

25. (Currently Amended) A method of increasing the farrowing rate of a female swine, comprising the step of administering to the female swine a feed composition comprising marine animal products ~~containing omega-3 fatty acids or esters thereof that serve as a source of metabolites in the female swine to increase the farrowing rate of the female swine~~ comprising C₂₀ and C₂₂ omega-3 fatty acids or esters thereof.

26. Canceled

27. Canceled

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31. Canceled

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40. Canceled

41. (Currently Amended) A method of increasing the reproductive

performance of a breeding population of swine comprising the ~~steps~~ step of:

administering to a female swine a feed composition comprising marine animal products ~~containing omega-3 fatty acids or esters thereof that serve as a source of metabolites in the female swine to improve reproductive performance of the female swine;~~ and comprising C₂₀ and C₂₂ omega-3 fatty acids or esters thereof

~~administering to a male swine a feed composition comprising an oil containing omega-3 fatty acids or esters thereof that serve as a source of metabolites in the male swine to increase fertility of the male swine.~~

42. Canceled

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49. Canceled
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71. (Previously Added) A method of increasing the reproductive

performance of a female swine, comprising the step of administering to the female swine a

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feed composition comprising marine animal products comprising C_{20} omega-3 fatty acids or esters thereof.

72. (Previously Added) A method of increasing the reproductive performance of a female swine, comprising the step of administering to the female swine a feed composition comprising marine animal products comprising C_{22} omega-3 fatty acids or esters thereof.
